

CHAPTER 4: FOREST CONDITIONS AND WILDFIRE

Southwest Oregon Forests - Unique and Challenging

Used with permission from Tom Sensenig, Ph.D., U.S. Forest Service, Ecologist. Excerpted from *Small Diameter Timber in Southwest Oregon: A Resource to Expand Utilization*

Southwestern Oregon forests exhibit extraordinary species diversity, ranking amongst the most diverse of all northern temperate forests. All northwestern plant formations dominated by trees occur in this area. The climate of southwestern Oregon is cool and wet in the winter and among the hottest and driest in the western Cascades in the summer. Because of this relatively dry climate and historically frequent fire events, the plant communities of southwestern Oregon tend to be found in smaller assemblages than in wetter environments found elsewhere in the northwest. This is partly due to the fact that resources, such as nutrients and growing season, are often limited, leading to abrupt environmental gradients. Slight variations in aspect and elevation can improve growing conditions sufficiently to influence which vegetative community will persist. This is also true at higher elevations where abrupt shifts in tree species composition are frequently observed. As a result of these and other factors, the forests in southwestern Oregon tend to exhibit great variability and exist in patches, varying in size and species composition. Managing such diverse forest landscapes is complex and presents a whole host of challenges both ecologically and administratively.

Current Situation

In recent years, forests throughout the southwestern region of Oregon have been observed to be under extreme environmental stress. This stress is due in part to unnaturally high tree densities as a result of fire exclusion. Although forests of all ages are exhibiting symptoms of stress, mortality has been most prevalent in older forests among large trees. Exacerbated by extended periods of low precipitation, many forests have lost and are continuing to lose a relatively high proportion of the older trees to density-induced mortality. This is cause for concern given that, in part, the Bureau of Land Management's (and Forest Service's) goal and mission is to restore and promote healthy forest ecosystems and habitats that include large trees.

Fire suppression efforts have clearly been effective in southwestern Oregon. Since 1920, over 5,265 lightning ignited wildfires have been extinguished by suppression personnel on lands administered by the Medford District BLM and the surrounding National Forests. The average size of these fires reached only about 15 acres, and less than 6% attained a size greater 1000 acres. It is presumed that historically, fires like these would have continued to burn across the landscape, perhaps throughout the entire dry season (June-October) until extinguished by fall precipitation. Even during summer thunderstorms, it is likely that parts of the landscape would escape precipitation, allowing for continued burning across a large region.

Prior to fire exclusion and in the absence of influences such as roads, farmland and European settlement, fires likely meandered throughout the forests year after year, modifying the forest vegetation and structure with every pass. In time, only ecological processes and species able to persist in the presence of frequent fire prospered, creating forest ecosystems that were not only adapted to frequent fire but dependant upon it. In the absence of frequent fire, ponderosa pine trees that thrived in fire prone environments became out-competed by more shade tolerant species, most commonly Douglas-fir. As a result, ponderosa and sugar pine trees, which are ecologically important for their contribution to the region's biological diversity and habitats, are rapidly declining in abundance throughout southwestern Oregon, creating landscapes of more homogenous and fire susceptible Douglas-fir. In addition, in the

absence of frequent fire, organic material has been accumulating on the forest floor at unprecedented levels, creating the potential for fires of greater and uncharacteristic intensity. High intensity fires are much more likely to reduce seed bank propagules, diminish soil structure, and cause extensive tree mortality and loss of habitat.

Both young and old forests throughout southwestern Oregon are becoming increasingly at risk of encountering fires of greater intensity. Even in old-growth stands, fire exclusion has facilitated an increase in under story vegetation, creating ladder fuels, and increasing the potential for canopy damage and stand mortality in the event of a fire.

The basic principle of forest ecosystem restoration is to identify the natural processes that historically sustained forest productivity, and then manage the existing resources utilizing an understanding of these processes. Therefore, silvicultural techniques including harvesting, thinning and prescribed burning must be utilized across the landscape to restore or partially mimic the historic role that fire once played.

Traditional Use of Fire and Native American Tribes

Archaeological evidence shows that Native American tribes arrived in Southern Oregon roughly 11,000 years ago.⁴⁶ Native tribes inhabited the lowland areas of the Rogue Valley year-round and used mid and upper elevations seasonally for hunting and gathering.⁴⁷ Major village sites were located along lower Ashland Creek, the Little Applegate, near Gold Hill, Prospect, and many smaller sites along the lower drainages of Jackson County watersheds.⁴⁸ During the end of the last ice age, the vegetation and fauna of Jackson County would have been greatly different than it is today. Evidence in the Upper Rogue River indicates that native peoples would have hunted now-extinct giant bison and mammoth. As the climate and vegetation changed over the next several thousand years, the types of food gathered and hunted by native people changed along with techniques to enhance these food sources.⁴⁹

Fire was a major tool used by many tribes to influence the production of certain plants, maintain habitats, and during hunting. Many of the primary food producing plants such as huckleberry, serviceberry (Saskatoon), bulbs, blackberries, acorns, hazelnuts, sugar pine, chinquapin, and madrone are primarily early seral species that respond positively to burning. Frequent burning ensured that adequate resources (sunlight, water, nutrients) were available for these favored food plants. Fire was also used in hunting to “round up” game, making it easier for hunters to capture or shoot (with bows) the animals. Although hunting pressures on game may have been locally intense, frequent fires would have favored species and habitats that game would have found favorable, therefore balancing the hunting pressures on the population.⁵⁰

Oregon/Northwest Fire and Fire Management History

The Pacific northwest has a long fire history beginning in prehistoric times when conditions first permitted lightning and terrestrial vegetation to co-exist, through the settling of this area and use of fire by Native Americans, and finally through changes in wildfire regimes brought on by Euro-American

⁴⁶ LaLande, Jeffrey M. 1997. *Environmental history: historic human processes influencing the Little Butte Creek Watershed*. Prepared for the Rogue River National Forest and Medford District BLM.

⁴⁷ LaLande, Jeffrey M. 1980. *Prehistory and history of the Rogue River National Forest: a cultural resource overview*. Rogue River National Forest. <http://soda.sou.edu:8080/soda/main.jsp?flag=browse&smd=3&awdid=19>

⁴⁸ Ibid.

⁴⁹ LaLande, Jeffrey M. 1997. *Environmental history : historic human processes influencing the Little Butte Creek Watershed*. Prepared for the Rogue River National Forest and Medford District BLM.

<http://soda.sou.edu:8080/soda/main.jsp?flag=browse&smd=3&awdid=12>

⁵⁰ LaLande, Jeffrey M. 1997. *Environmental history : historic human processes influencing the Little Butte Creek Watershed*. Prepared for the Rogue River National Forest and Medford District BLM. Online:

<http://soda.sou.edu:8080/soda/main.jsp?flag=browse&smd=3&awdid=12>

settlement throughout the area.

As European explorers came to Oregon, they noted the presence of smoke and burned vegetation. David Douglas (whose name was given to Oregon's state tree, the Douglas-fir) described the charred landscape, largely due to Native American burning practices, as he made his way south through the Willamette Valley into the Umpqua basin in 1826. Douglas's party often found it difficult to camp, find forage for horses, and walk on the stubble left behind by recent fires.⁵¹ Native American burning practices were similar in the Rogue River basin and Jackson County, as noted later in this chapter.

Euro-American settlement of Oregon's valleys began a drastic change in the relationship between man, fire, and forests⁵². As agriculture replaced hunting and gathering as the predominant land use, fire was a commonly relied up tool. Just as Native Americans had done, the first settlers used fire to clear land. It was likely a mix of settlers and indigenous peoples who set fires in the late 1840's that burned nearly a million of acres over multiple years near the Siuslaw and Siletz rivers. Interestingly, as settlements became permanent towns and cities, the largest complaint was not fire itself, but the smoke. Smoke was so thick along the Columbia River that officials almost put up lighthouses to help ships navigate in the smoke. 1868 was another particularly active fire season in Oregon's history. It's estimated that over 1 million acres burned that year along the Pacific coastline. Driven by strong east winds, major fires near the mouth of the Columbia River and Coos Bay cast large parts of the state under a veil of smoke. Property damage was limited due to the unsettled nature of the area. The history of fire in Oregon and the northwest was only heating up in the late 1800's as settlers poured into the area and logging, mining, and grazing took hold as dominant land uses and all as causes of fires.

It was during this time that the tide of flames began to change, albeit slowly. The model of modern firefighting was being created in New York's Adirondack and Catskill Forest Reserves, where the deep roots of fire protection ran back to at least 1760, when a fire warden system was adopted among several counties. This system was bolstered over time and led to fire protection sponsored by the State of New York in conjunction with local governments. It was both in New York and in Yellowstone Park where firefighting policy changed from a defensive strategy to successful attack on fires over a large part of a landscape. This policy of total fire suppression was to be further legitimated as timber management on a large scale spread into the forests of the nation, creating a value to protect and motivation to invest in fire management.⁵³

The creation of federal forest reserves started in 1891 when Congress passed the Land Revision Act, giving the president power to reserve forest lands. Lands throughout Oregon were set aside in 1892-1893, including the Cascade and Ashland Forest Reserves.⁵⁴ The creation of the reserves allowed the federal government to patrol and suppress fires as a matter of policy for the first time. Despite the early suppression efforts, fires still burned as evidenced by this quote from an Ashland Forest Ranger:

"The fiercest timber fire that has ever taken place close to Ashland has been raging along the hillsides of the Ashland Creek Canyon for the past three days, and its work of destruction was only placed under control last evening"

-Ranger W. Kripke. August 26, 1901⁵⁵.

⁵¹ Stephen J. Pyne. *Fire in America: A Cultural History of Wildland and Rural Fire*. 1982. Princeton University Press, New Jersey. Pg 335.

⁵² Ibid. 336.

⁵³ Pyne, Stephen J. *Fire in America: A Cultural History of Wildland and Rural Fire*. 1982. Princeton University Press, New Jersey. Pg. 225.

⁵⁴ Wilma, David. February 28, 2003. "Congress establishes the first federal forest reserves on March 3, 1891", Online Encyclopedia of Washington State History. <http://www.historylink.org/>

⁵⁵ McCormick, R.J., et. al. 1992. *Ashland Forest Plan..* City of Ashland. Online:

Timber companies became part of the battle after realizing losses in timber supply to large fires. Federal forest rangers and industry sponsored fire patrols began to gain ground on careless land-users from campers to sheep grazers, but not necessarily on fires themselves. Another summer and fall of widespread fire and smoke in 1902 spurred more common use of fire patrols in the following years. Cooperative fire patrols were popping up all over the country and the Pacific states were no exception. By 1909, cooperative fire protection had evolved into the Western Forestry and Conservation Association⁵⁶, which ironically preceded one of the most noteworthy years in wildfire history, 1910. Five million acres of national forests burned and eighty-five people died in fires in 1910, nearly all firefighters.⁵⁷ The U.S. Forest Service was created just prior to this period, and the fires of 1910 put the Forest Service at the forefront of forest fire policy and suppression.

Although protection and prevention efforts continued, major fires burned Oregon's forests through the early part of the 20th century, but none like the legendary Tillamook Burn. Actually a series of fires, the first of the legendary Tillamook Burns, swept through prime forestland in Tillamook County in 1933. The 1933 fire was the largest, consuming 239,695 acres, nearly 200,000 of those acres in one twenty-hour period.⁵⁸ Subsequent fires in 1939, 1945, and 1951 burned an additional 402,490 acres, some re-burning the same acres two or three times over.⁵⁹ The Tillamook burns rallied communities, bringing out hundreds of workers to plant millions of trees in the years following. Interestingly, the Tillamook burn pioneered the use of large, organized crews of firefighters from the Civilian Conservation Corps (CCC), which were later on the Siskiyou National Forest in the 1940's.⁶⁰ Another modern firefighting mainstay, the smokejumpers, were given the first test in Washington State soon after the CCC experience at Tillamook.

World War II altered the nation's view of wildfire. The association of fire with the destruction of many European cities and with the atomic bomb cemented forest fire suppression in a deeply militaristic mode. The technology and capacity created during the wartime effort was put to use creating a fire fighting army. Although aircraft were used for fire detection as early as the 1920s, the use of planes to drop retardant on fires didn't happen until 1956.⁶¹ A helicopter attack program was developed in a partnership with the Forest Service and the Army Corps of Engineers. A major triumph was made in 1966 when the Oxbow fire (in Oregon) was stopped in the face of a strong east wind, which was notorious for fanning conflagrations such as the Tillamook Burn. A milestone policy resulted from the success of mechanized fire suppression. The "10 a.m. Policy" was adopted, where crews intended to extinguish all fires by 10 a.m. the following morning. Although this policy was eventually modified, the legacy of this policy remains. Despite the increased success at putting out fires with modern technology, forests and communities have continued to burn during the modern history of wildfire suppression.

Although fires were controlled and suppressed with increasing success, large fires continued to burn across the region, including Jackson County. The Ashland Watershed fire of 1959 nearly burned all of the Ashland Watershed, and another fire in 1973 almost did the same from the opposite side of the town. Recent wildfires in Jackson County include: the 1994 Hull Mountain fire which burned 8,000 acres; the 2001 Quartz Mountain fire which burned 6,300 acres; the 2002 Squires Peak fire which burned 2,000

<http://www.ashland.or.us/Files/Forest%20Plan%201992..pdf>

⁵⁶ Pyne, Stephen J. *Fire in America: A Cultural History of Wildland and Rural Fire*. 1982. Princeton University Press, New Jersey. Pg. 339.

⁵⁷ Ibid. pg 241

⁵⁸ Ibid. pg 339.

⁵⁹ Tillamook county website <http://www.tillamoo.com/burn.html>.

⁶⁰ Pyne, Stephen J. *Fire in America: A Cultural History of Wildland and Rural Fire*. 1982. Princeton University Press, New Jersey. Pg. 341.

⁶¹ Pyne, Stephen J. *Fire in America: A Cultural History of Wildland and Rural Fire*. 1982. Princeton University Press, New Jersey. Pg. 443.

acres and threatened many homes, and the 2002 Timbered Rock fire which encompassed 27,000 acres⁶²

Wildland-Urban Interface Fires in Oregon

The history of wildland urban interface fires is an important reference point for current wildfire safety efforts. Interestingly, many of the catastrophic fires in Oregon's history affected the coastal towns and forests, regions not typically associated with fires in more recent history (see table 4.1). During the settlement of Oregon (mid 1800's), human caused fires ravaged the forests and settlers. In 1864, the State passed a law that protected settler's homes from fires set by other settlers.⁶³ However, it was little heeded or enforced and fires continued to affect homes and towns. The largest losses of structures and life occurred in the coastal towns of Bandon and Astoria. Bandon literally burned to the ground in 1914 and again in 1936, when 11 people perished in the fire. Only 16 out of 500 buildings made it through the fire.⁶⁴

“Carried by an east wind of gale-like force, a forest fire swept into the town of Bandon late on the evening of September 26, practically wiping out the town and resulting in the death of 11 persons.”
- The Forest Log, the Oregon Department of Forestry’s newsletter⁶⁵

Many communities throughout Oregon had close calls with wildfires in 1936. Homes were lost, but the towns of Myrtle Point, Yachats, Lincoln City, Alsea, Depoe Bay, Estacada, Detroit, Niagara, and Mill City managed to avoid the flames through a mixture of luck and aggressive fire-fighting techniques.

In the post World War II era as urban and suburban areas became populated and incomes rose, more and more people fled the cities and settled in the forested areas of Oregon. Some found out the hard way that they had moved into high risk areas. The term “Wildland Urban Interface” gained popularity to describe the new challenges of managing wildfires in a populated area.

Southwest Oregon has had its share of destructive fires. The East Evans Creek and Hull Mountain fires in Jackson County both burned homes and the Hull Mountain Fire cost a firefighter his life.⁶⁶

Table 4.1. Oregon's Most Destructive Wildland/Urban Interface Fires

Year	Fire Name	Acres Burned	County	Structures Burned	Cost
1936	Bandon	Unknown	Coos	484	Unknown
1987	Bland Mountain	10,300	Douglas	14	Unknown
1990	Awbrey Hall	3,400	Deschutes	22	\$2.2 million
1992	Sage Flat	991	Deschutes	5	\$1.2 million
1992	East Evans Creek	10,135	Jackson	4	\$8.2 million
1992	Lone Pine	30,727	Klamath	3	\$500,00
1994	Hull Mountain	8,000	Jackson	44	\$10 million

⁶² Jackson County Emergency Operations Plan. 2004. Jackson County, Oregon. Online: <http://www.co.jackson.or.us/files/eop%20p1.pdf>

⁶³ Oregon Department of Forestry. *A Short History of Wildland Urban Interface Fire in Oregon.* http://egov.oregon.gov/ODF/FIRE/SB360/wui_history.shtml

⁶⁴ Ibid.

⁶⁵ *A short history of wildland/urban interface fire in Oregon.* Oregon Department of Forestry http://egov.oregon.gov/ODF/FIRE/SB360/wui_history.shtml

⁶⁶ Ibid.

1996	Skeleton	17,700	Deschutes	17	\$2 million
2002	Eyerly	23,573	Jefferson	37	\$10.7 million
2002	Cache Mountain	4,200	Deschutes	2	\$4.3 million
2002	Sheldon Ridge	12,761	Wasco	8	\$3.3 million
2002	Squires Peak	2,804	Jackson	6	\$2 million
2002	Biscuit	499,965	Josephine/Curry	14	\$150 million

Sources: Forest Log, [National Interagency Coordination Center](#) situation reports

The wildland-urban interface is a challenge yet to be conquered. Homes continue to burn in WUI fires across the country and in Jackson County. Looking back, the lessons learned by communities, homeowners, and fire agencies can be used to inform and improve current level of preparedness. Chapter 7 of the JaCIFP contains important information for homeowners and fire services about home fire safety. History proves that the saying “It won't happen to me” is not necessarily true. Wildfire *does happen* to residents in Jackson County.

Wildfire Causes

The Oregon Department of Forestry (ODF) Southwest Oregon unit has kept fire records since 1960. The causes of wildfires have not changed much over time but the causes have illustrated trends. There have been notable declines in fires caused by smoking and railroads. Notable increases in fire starts during this time period are attributed to recreationists and equipment. The highest number of fire starts, most costly fires, and most acres burned are due to lightning strikes. Lightning fires outnumber the second most common cause by a margin of two to one (see Table 4.2).

Table 4.2. ODF Central Point Office Wildfires by Cause 1960-2005⁶⁷

Wildfire Causes 1960-2005	Percent of all fires	Trend
Lightning	33.7%	Stable
Equipment	16.81%	Increase
Miscellaneous	10.59%	Stable
Debris Burning	9.87%	Stable
Smoker	9.65%	Decrease
Arson	7.16%	Stable
Juvenile	5.95%	Decrease
Recreationist	4.52%	Increase
Railroad	1.74%	Decrease

Fire Regime Condition Class

A **fire regime** is the characteristic fire occurrence, size, severity, and fire effects in a given area or ecosystem assuming no human intervention except Native American use of fire.⁶⁸ Fire regimes are characterized by the intensity of the disturbance to the forest and how often the characteristic disturbance occurs. Fire regimes include the following:

I. 0-35 years Low severity to mixed severity - Low severity is characterized by frequent ground fires and relatively low mortality of trees. Mixed severity is characterized by less than 75% overstory

⁶⁷ Oregon Department of Forestry, Central Point. Fire Cause Data 1960-2005. Unpublished.

⁶⁸ Agee, J.K. 1993. *Fire Ecology of the Pacific Northwest Forests*. Island Press. Washington, D.C.

mortality in relatively small areas;

II. – 0-35 year frequency and high (stand replacement) severity – Greater than 75% of the dominant overstory vegetation replaced;

III. – 35-100+ year frequency and mixed severity - Less than 75% of the dominant overstory vegetation replaced;

IV. – 35-100+ year frequency and high (stand replacement) severity - Greater than 75% of the dominant overstory vegetation replaced;

V. – 200+ year frequency and high (stand replacement) severity - Greater than 75% of the dominant overstory vegetation replaced.

Condition class is a particular area's departure from its historic fire regime.⁶⁹ Departure from an historical fire regime can result from an altered frequency or severity of fire when compared with the historical natural range of variation in the ecosystem. The following table shows the three major categories of condition class with a brief description of implications.⁷⁰

Table 4.1 Three Categories of Fire Regime Condition Class

Condition Class	Description	Potential Risks
Condition Class 1	Within the natural (historical) range of variability of vegetation characteristics; fuel composition; fire frequency, severity and pattern; and other associated disturbances	Fire behavior, effects, and other associated disturbances are similar to those that occurred prior to fire exclusion (suppression) and other types of management that do not mimic the natural fire regime and associated vegetation and fuel characteristics. Composition and structure of vegetation and fuels are similar to the natural (historical) regime. Risk of loss of key ecosystem components (e.g. Native species, large trees, and soil) is low.
Condition Class 2	Moderate departure from the natural (historical) regime of vegetation characteristics; fuel composition; fire frequency, severity and pattern; and other associated disturbances	Fire behavior, effects, and other associated disturbances are moderately departed (more or less severe). Composition and structure of vegetation and fuel are moderately altered. Uncharacteristic conditions range from low to moderate; Risk of loss of key ecosystem components is moderate.
Condition Class 3	High departure from the natural (historical) regime of vegetation characteristics; fuel composition; fire frequency, severity and pattern; and other associated disturbances.	Fire behavior, effects, and other associated disturbances are highly departed (more or less severe). Composition and structure of vegetation and fuel are highly altered. Uncharacteristic conditions range from moderate to high. Risk of loss of key ecosystem components is high.

Fire and Fuels Management Implications

Fire regimes and condition class are commonly used by federal land managers to identify and prioritize

⁶⁹ Hann, W.J., Bunnell, D.L. 2001. Fire and land management planning and implementation across multiple scales. *Int. Wildland Fire*. 10:389-403. Online: www.frcc.gov

⁷⁰ Hardy, C.C., Schmidt, K.M., Menakis, J.M., Samson, N.R. 2001. Spatial data for national fire planning and fuel management. *International Journal of Wildland Fire* 10:353-372. Online: www.frcc.gov

projects for restoration and hazardous fuels mitigation treatments. Condition Class is mentioned specifically in the 2003 Healthy Forests Restoration Act as a means of prioritizing and tracking fuels reduction and forest restoration work across federal lands. Fire regime and condition class are reported for all projects and the data feeds into the National Fire Plan Operating and Reporting System (NFPORS). Changes in condition class are recorded as the potential fire effects are lessened by restoration and fuels reduction treatments.

Fire Suppression

Wildfire suppression in Jackson County falls under the responsibility of multiple fire agencies at various levels of government. At the federal level, the U.S. Forest Service (Rogue River-Siskiyou National Forest) maintains fire fighting crews and equipment on staff and can hire contract resources during a fire to augment federal resources. The Rogue River Hot Shots, a highly trained (Type 1) 20-person crew, is based out of the Prospect Ranger District. A key resource maintained in Medford is the air tanker base. The tanker base is funded and operated through State of Oregon severity funding, U.S. Forest Service funds, County grant funding, and by operational funds dedicated during a wildfire incident⁷¹. Other aerial resources include a Rogue-Siskiyou National Forest helicopter rappel team stationed in Merlin and helicopters for aerial surveillance and suppression of fires.

The Medford District BLM contracts wildfire protection duties to the Oregon Department of Forestry, but also maintains a staff of approximately 140-160 firefighters trained in fire fighting and the various sections of the Incident Command System (operations, planning, finance, and logistics). BLM employees can be called on by ODF and Forest Service to work on a fire in a variety of roles. The contract with ODF is for direct suppression activities and overhead management of suppression although there are BLM overhead trained personnel who often manage a fire to free up ODF personnel for other fires or initial attack responsibilities. The BLM district manager maintains land management responsibility and BLM representatives serve on multi-agency coordinating groups and as part of unified command. A representative from BLM, including a resource advisor, is appointed to each fire to assist with land management issues related to the fire. The BLM jointly participates in agreements for aerial firefighting.⁷²

Oregon Department of Forestry

The Oregon Department of Forestry (ODF) is the agency responsible for wildfire protection on private, county, state, and BLM administered lands in Jackson County. During fire season, ODF provides this protection by staffing ten fire engines at stations scattered throughout the county, and 3 engines, one small hand crew, and one bulldozer in Central Point. ODF has mutual aid agreements with all of the rural fire agencies in Jackson County, and maintains close cooperation with the U.S. Forest Service, BLM, adjoining ODF units, and industrial forestry landowners. In addition, when fires burn beyond initial attack, ODF is geared up to obtain fire overhead teams, bull dozers, hand crews, fire engines, helicopters, retardant planes and any other fire fighting resources necessary to control wildfires.⁷³

Cooperation with the rural fire agencies allows for effective initial attack on many fires in the interface area because any fire agency can take initial attack actions to stop the spread of wildland fires. This cooperation is promoted by working under the incident command system, which allows for a coordinated, structured effort between fire agencies from initial attack through extended attack. ODF's priorities are life, resources and property. ODF is not trained, funded or equipped to fight structure fires.

⁷¹ Greg Alexander, Oregon Department of Forestry Unit Forester. Pers. Comm. 2006.

⁷² Tom Murphy, Medford District BLM. Pers Comm. 2006.

⁷³ Greg Alexander, SW Oregon Unit Forester, Oregon Department of Forestry. Pers. Comm.

Rogue Valley Fire Chief's Association Structural Protection Task Force

During a wildfire incident in Josephine or Jackson counties, incident commanders can call on a special task force that mobilizes fire engines and personnel from fire departments in the two counties. This agreement between the fire departments allows for an increased ability to protect homes or other structures during a wildfire, far beyond what local fire departments could accomplish without the task force.

State of Oregon Conflagration Act

“The Conflagration Act was developed in 1940 as a civil defense measure and can be invoked only by the Governor. The act allows the State Fire Marshal to mobilize firefighters and equipment from around the state and provides for the funding of resources through state funds. The Conflagration Act is **only** used for fires that involve or **threaten life and structures**.

How is the Conflagration Act invoked?

The local fire chief and county fire defense chief assess the incident status with the following kinds of questions in mind.

- Are there structure fires not controlled due to sheer size and/or speed of the fire?
- Is a wildland fire threatening structures?
- Have all local and mutual aid resources been depleted?
- Would mobile support resources be effective?

If the answers are yes, then the county fire defense chief notifies the state fire marshal through the Oregon Emergency Response System. The state fire marshal decides, in discussion with the county fire defense chief, if the situation warrants Conflagration Act implementation. Once decided, the state fire marshal notifies the governor, who authorizes the act to be invoked. At this point, the *Fire Service Mobilization Plan* becomes effective⁷⁴.”

The Fire Service Mobilization Plan

“The **Fire Service Mobilization Plan**⁷⁵ is a guide for OSFM personnel and emergency responders to use during times of emergency. The plan establishes operating procedures for the most practical utilization of state firefighting resources for emergencies, which are beyond the capabilities of the local fire service resources. It assumes the prior existence of mutual aid agreements, which organize district and regional firefighting forces to cope with local emergencies.⁷⁶”

Commercial Logging Practices

Commercial logging practices on non-federal lands in Oregon are guided by the Oregon Forest Practices Act, Oregon Administrative Rules Chapter 629. The rules are enforced by the Oregon Department of Forestry. State rules include chapters on wildfire prevention during timber harvests, including the system of precaution levels and fire restrictions placed on forest equipment operators each year during fire season. The Industrial Fire Precaution Level (IFPL) restrictions are in Resource B.⁷⁷

Commercial logging practices on federal lands in Jackson County are governed by the Northwest Forest Plan of 1994, the local Forest Service or BLM District's land management plan, and the Record of Decision made for an individual logging project involving federal land. The Forest Service has a set of regulations that apply to forest equipment operators during fire season.

⁷⁴ Office of State Fire Marshall website. Online: http://www.oregon.gov/OOHS/SFM/Conflagration_FAQs.shtml

⁷⁵ Oregon State Fire Marshall. Online: http://www.oregon.gov/OOHS/SFM/Emergency_Mob_Plan_Index.shtml

⁷⁶ Ibid.

⁷⁷ Ibid.